

Serial No. 09/660,110

- 13 -

Art Unit: 2143

REMARKS

This Amendment is responsive to the Final Office Action dated September 8, 2005. All rejections and objections of the Examiner are respectfully traversed. Reconsideration and further examination is respectfully requested.

Applicants wish to thank Examiner Chaudhury and his Supervisor for their courteous and helpful consultation and suggestions in a telephonic interview on Nov. 1, 2005. The amendments herein are intended to reflect that discussion. Should there be further issues warranting discussion, the Examiner is strongly encouraged to telephone the undersigned Attorney.

Support for the present amendments to the claims is found throughout the Specification as originally filed, and in particular in the following sections: page 3 lines 19-27, page 5 lines 14-21, page 16, lines 1-3, page 16 line 28 through page 17 line 6, and original claim 16.

At paragraphs 1-42 of the Office Action, the Examiner rejected claims 1-4 and 6-57 for obviousness under 35 U.S.C. 103(a), citing the combination of Tony Ballardie and Jon Crowcroft in "Multicast-Specific Security Threats and Counter-Measures" ("Ballardie"), and United States Patent number 6,154,463 of Aggarwal et al. ("Aggarwal et al."). Applicants respectfully traverse this rejection. As noted in the previous response, and as discussed in the interview of Nov. 1, the Examiner relies significantly on Aggarwal et al. for teaching the presently claimed techniques for access devices joining multicast groups as a substitute for subscriber devices in a subscriber location, particularly on column 22 of Aggarwal et al. Accordingly, the below arguments deal with the combination of Ballardie and Aggarwal et al., with specific attention to the teachings in column 22 of Aggarwal et al.

Serial No. 09/660,110

- 14 -

Art Unit: 2143

Aggarwal et al. generally disclose a protocol that controls initial entry of members into a discussion group, supports security mechanisms that can be developed for the Internet environment, and provides dynamic joining and leaving of members of a discussion group. See column 3, lines 22-30. As specifically described in column 22 of Aggarwal et al., a gatekeeper router maintains routes to group members, and all group members passing through the gatekeeper router are each individual members of the group. Aggarwal et al. also teaches that the gatekeeper router can operate as a filter for join requests, in that it can accept or reject them.

As previously noted, Ballardie discusses security risks in networks that have multicasting, previous approaches to multicast security, and a proposed authorization infrastructure using authentication servers that support a technique for multicast group access control.

Nowhere in the combination of Ballardie and Aggarwal et al. is there disclosed or suggested any multicast communication system having multiple subscriber locations, each subscriber location having a single access device through which a plurality of subscriber devices access multicast information sent by a multicast distribution device, and in which:

... wherein each said access device operates by joining and leaving at least one multicast group as a substitute for the subscriber devices at its respective subscriber location, and wherein each said access device processes a first join request received from one of said subscriber devices by determining whether said access device is already joined to a multicast group indicated by said first join request, and, *in the event that said access device is not already joined to said multicast group indicated by said first join request, sending a second join request to said multicast distribution device, wherein said second join request is a request for said access device to join said multicast group, and wherein said access device does not forward said first join request to said multicast distribution service.* (emphasis added)

as in the present independent claims 1, 4, 15, 28 and 42. In contrast, the Gatekeeper Application described in column 22 of Aggarwal et al. handles join requests by either *accepting or rejecting*

Serial No. 09/660,110

- 15 -

Art Unit: 2143

them. In the case where a join request is accepted by the Gatekeeper Application of Aggarwal et al., the Gatekeeper Application informs a Gatekeeper Router for purposes of establishing a route to the new member. Neither the Gatekeeper Application nor the Gatekeeper Router of Aggarwal et al. operates by "*sending a second join request to said multicast distribution device, wherein said second join request is a request for said access device to join said multicast group, and wherein said access device does not forward said first join request to said multicast distribution service*", as in the present independent claims. In contradistinction, the gatekeeper application and gatekeeper router of Aggarwal et al. facilitate members joining the group directly, as described with regard to users 151 and 152 in column 22, which themselves become members of the group. Nothing in Aggarwal et al. or Ballardie suggest the Gatekeeper Router or Gatekeeper Application, or any other device, operate by sending a second join request for the Gatekeeper Router or Gatekeeper Application to join the group. Moreover, since Ballardie also expressly teaches that client systems themselves are responsible for joining multicast groups, and that client systems directly issue their own join messages, both Ballardie and Aggarwal et al. teach away from any system, such as that of the present independent claims, in which an access device operates to join a multicast group as a substitute for multiple subscriber devices in a subscriber location.

Applicants also respectfully urge that the Examiner has not established a sufficient motivation to combine the cited references. A *prima facie* case of obviousness under 35 U.S.C. 103 must include a showing of a suggestion, teaching or motivation that would have led a person of ordinary skill in the art to combine the cited references *in the particular manner claimed*. See In re Dembiczak, 175 F.3d 994, 998 (Fed. Cir. 1999), and In re Kotzab, 217 F.3d 1365, 1371 (Fed. Cir. 2000). In the present Office Action, the Examiner asserts that "it would have been

Serial No. 09/660,110

- 16 -

Art Unit: 2143

obvious to one skilled in the art, during the time of the invention, to combine the teachings of Ballardie with those of Aggarwal, to provide multicast capability". Applicants respectfully submit that both Ballardie and Aggarwal et al. independently describe the use of multicasting. Accordingly, there is no need to combine one with other to "provide multicast capability", since both independently provide such capability.

For the reasons stated above, Applicants respectfully urge that the combination of Ballardie and Aggarwal et al. does not disclose or suggest all the features of the present independent claims 1, 4, 15, 28 and 42. Accordingly, the combination of Ballardie and Aggarwal et al. does not support a *prima facie* case of obviousness under 35 U.S.C. 103 with regard to claims 1, 4, 15, 28 and 42. As to the remaining claims, they each depend from either claim 1, 4, 15, 28 or 45, and are believed to be patentable over the combination of Ballardie and Aggarwal et al. for at least the same reasons. Reconsideration of all pending claims is respectfully requested.

For these reasons, and in view of the above amendments, the Examiner's rejections are respectfully believed to be overcome, and it is respectfully requested that they be withdrawn. This application is now considered to be in condition for allowance and such action is earnestly solicited.

Serial No. 09/660,110

- 17 -

Art Unit: 2143

Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone David A. Dagg, Applicants' Attorney at 617-630-1131 so that such issues may be resolved as expeditiously as possible.

Respectfully Submitted,

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Date

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Docket No. 120-348